

Appendix I. Measured Downlink Carrier Aggregation(CA) Result

The DL CA measuring result is shown as below.

Downlink Carrier Aggregation Scenarios Conducted Power

Configure	Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6				Measurement Power		
		LTE Band	BW [MHz]	UL Channel	UL Freq. [MHz]	UL RB	UL Offset	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	Maximum Tune-up Power	Single Carrier Tx Power without DL-CA Active (dBm)	Tx Power with DL-CA Active (dBm)
																																		Total		
	CA_5A-7A-48C	5	10	20450	829	1	0	2450	874	7	20	3100	2655	46	20	46790	5150	46	20	46988	5169.8													23.5	23.46	23.33
	CA_5A-7A-66A-66A	5	10	20450	829	1	0	2450	874	7	20	3100	2655	66	20	67036	2170	66	20	66786	2145													23.5	23.46	23.24
	CA_13A-48A-48C-66A	13	10	23230	782	1	0	5230	751	48	20	55340	3647	48	20	55780	3660.8	66	20	55968	3622.8	66	20	67036										23.5	23.47	23.11
	CA_13A-48C-66B	13	10	23230	782	1	0	5230	751	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2145	66	20	66987	2165.1									23.5	23.47	23.25
	CA_13A-48C-65C	13	10	23230	782	1	0	5230	751	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2145	66	20	66588	2125.2									23.5	23.47	23.22
	CA_2A-12B-66A-66A	2	20	18700	1860	1	0	700	1940	12	10	5060	734	12	10	5159	743.9	66	20	67036	2170	66	20	66786	2145									23	22.83	22.41
	CA_13A-48D-66A	13	10	23230	782	1	0	5230	751	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6	66	20	67036	2170									23.5	23.47	23.40
	CA_2A-13A-48A-48C	2	20	18700	1860	1	0	700	1940	13	10	5230	751	48	20	55340	3560	48	20	55780	3560	48	20	55968	3622.8									23	22.83	22.74
	CA_2A-13A-48D	2	20	18700	1860	1	0	700	1940	13	10	5230	751	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6									23	22.83	22.68
	CA_2A-13A-66A-66B	2	20	18700	1860	1	0	700	1940	13	10	5230	751	66	20	67036	2170	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.74
	CA_2A-13A-66A-66C	2	20	18700	1860	1	0	700	1940	13	10	5230	751	66	20	67036	2170	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.74
	CA_2A-13A-66D	2	20	18700	1860	1	0	700	1940	13	10	5230	751	66	20	67036	2170	66	20	66838	2150.2	66	20	66640	2130.4									23	22.83	22.55
	CA_2A-14A-66A-66A-66A	2	20	18700	1860	1	0	700	1940	14	10	5330	763	66	20	67036	2170	66	20	66786	2145	66	20	66536	2120									23	22.83	22.65
	CA_2A-2A-12A-66A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	12	10	5010	729	66	20	67036	2170	66	20	66786	2145									23	22.83	22.35
	CA_2A-2A-12B-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	12	10	5060	734	12	10	5159	743.9	66	20	67036	2170									23	22.83	22.52
	CA_2A-2A-13A-66B	2	20	18700	1860	1	0	700	1940	2	20	900	1960	13	10	5230	751	66	20	67036	2170	66	20	66987	2165.1									23	22.83	22.41
	CA_2A-2A-13A-66A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	13	10	5230	751	66	20	67036	2170	66	20	66786	2145									23	22.83	22.56
	CA_2A-2A-14A-66A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	14	10	5330	763	66	20	67036	2170	66	20	66786	2145									23	22.83	22.76
	CA_2A-2A-5A-66A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	20	67036	2170	66	20	66786	2145									23	22.83	22.65
	CA_2A-2A-5A-66B	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	10	67086	2175	66	10	66987	2165.1									23	22.83	22.54
	CA_2A-2A-5A-66C	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.54
	CA_2A-2A-5B-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	5	10	2549	883.9	66	20	67036	2170									23	22.83	22.32
	CA_2A-46A-48C-66A	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	50665	5537.5	46	20	50863	5537.5	66	20	67036	2170									23	22.83	22.33
	CA_2A-46A-48C-66A	2	20	18700	1860	1	0	700	1940	48	20	55340	3560	48	20	55780	3603	48	20	55968	3622.8	66	20	67036	2170									23	22.83	22.50
	CA_2A-48D-66A	2	20	18700	1860	1	0	700	1940	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6	66	20	67036	2170									23	22.83	22.39
	CA_2A-5A-48A-48C	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	55340	3560	48	20	55780	3603	48	20	55968	3622.8									23	22.83	22.54
	CA_2A-5A-48D	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6									23	22.83	22.74
	CA_2A-5A-5A-66A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2600	889	66	20	67036	2170	66	20	66786	2145									23	22.83	22.63
	CA_2A-5B-66A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	20	67036	2170	66	20	66786	2145									23	22.83	22.52
	CA_2A-5B-66B	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	10	67086	2175	66	10	66987	2165.1									23	22.83	22.52
	CA_2A-5B-66C	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.30
	CA_2C-5B-30A	2	20	18700	1860	1	0	700	1940	2	20	898	1959.8	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355									23	22.83	22.36
	CA_4A-4A-5B-30A	4	20	20380	1745	1	0	2300	2145	4	20	2175	2132.5	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355									23	22.92	22.51
	CA_4A-4A-8C-66A	5	10	20450	829	1	0	2450	874	48	20	55340	3560	48	20	55780	3603	48	20	55968	3622.8	66	20	67036	2170									23.5	23.46	22.71
	CA_5A-48D-66A	5	10	20450	829	1	0	2450	874	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6	66	20	67036	2170									23.5	23.46	22.60
	CA_5A-7A-48D	5	10	20450	829	1	0	2450	874	7	20	3100	2655	46	20	50665	5537.5	46	20	50863	5537.5	46	20	51061	5577.1									23.5	23.46	22.40
	CA_5B-30A-66A-66A	5	10	20450	829	1	0	2450	874	5	10	2450	883.9	30	10	9820	2355	66	20	67036	2170	66	20	66786	214											

Downlink Carrier Aggregation Scenarios Conducted Power

Configure	Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6				Measurement Power					
		LTE Band	BW [Mhz]	UL Channel	UL Freq. [MHz]	UL RB	UL Offset	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	Maximum Tune-up Power	Single Carrier Tx Power without DL-CA Active (dBm)	Tx Power with DL-CA Active (dBm)			
																																		Total					
	CA_2A-2A-5A-30A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	30	10	9820	2355	66	20	67036	2170									23	22.83	22.51			
	CA_2A-2A-7A-12A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	7	20	3100	2655	12	10	5095	737.5	66	20	67036	2170									23	22.83	22.71			
	CA_2A-46A-48C-66A	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	56210	3647	48	20	56408	3666.8	66	20	67036	2170										23	22.83	22.60		
	CA_2A-46C-48A-66A	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	46	20	56210	3647	66	20	67036	2170										23	22.83	22.49		
	CA_2A-4A-5B-30A	2	20	18700	1860	1	0	700	1940	4	20	2300	2145	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355										23	22.83	22.49		
	CA_2A-5A-30A-66A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	30	10	9820	2355	66	20	67036	2170	66	20	66786	2145										23	22.83	22.27		
	CA_2A-5A-48A-48A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	56210	3647	48	20	56640	3690	66	20	67036	2170										23	22.83	22.28		
	CA_2A-5A-48C-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2170										23	22.83	22.45		
	CA_2A-7A-12B-66A	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	12	10	5060	734	12	10	5159	743.9	66	20	67036	2170										23	22.83	22.34		
	CA_2A-5B-30A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355	66	20	67036	2170										23	22.83	22.49		
	CA_2A-7A-7A-29A-66A	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	7	20	3350	2680	29	10	9715	722.5	66	20	67036	2170										23	22.83	22.69		
	CA_2A-7C-29A-66A	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	7	20	3298	2674.8	29	10	9715	722.5	66	20	67036	2170										23	22.83	22.58		
	CA_2A-46A-48D-66A	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	48	20	55812	3607.2	48	20	55614	3587.4	48	20	55416	3567.6	66	20	67036	2170						23	22.83	22.47		
	CA_2A-46C-48C-66A	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2170							23	22.83	22.74	
	CA_2A-46D-48A-66A	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	48	20	56210	3647	66	20	67036	2170							23	22.83	22.55	
	CA_2A-46C-48D-66A	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	48	20	55812	3607.2	48	20	55416	3567.6	66	20	67036	2170							23	22.83	22.65	
	CA_2A-46D-48C-66A	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2170				23	22.83	22.35
	CA_2A-46E-48A-66A	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	46988	5169.8	46	20	47186	5189.6	46	20	47384	5209.4	48	20	56210	3647	66	20	67036	2170				23	22.83	22.52
	CA_2A-5A-46E-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	46	20	46790	5150	46	20	46988	5169.8	46	20	47186	5189.6	46	20	47384	5209.4	66	20	67036	2170				23	22.83	22.41
	CA_2A-13A-46D-66A-66A	2	20	18700	1860	1	0	700	1940	13	10	5230	751	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	66	20	67036	2170	66	20	66786	2145	23	22.83	22.33			
	CA_2A-5A-46D-66A-66A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	66	20	67036	2170	66	20	66786	2145	23	22.83	22.55			
	CA_2A-2A-29A-30A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	29	10	9715	722.5	30	10	9820	2355														23	22.83	22.45		
	CA_2A-2A-66A-66A	2	20	18700	1860	1	0	700	1940	2	20	900	1960	66	20	67036	2170	66	20	66786	2145													23	22.83	22.34			
	CA_5A-41A	5	10	20450	829	1	0	2450	874	41	20	40185	2549.5																				23.5	23.46	23.33				

Downlink 4X4 Carrier Aggregation Scenarios Conducted Power

Configure	Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6				Measurement Power			
		LTE Band	BW [MHz]	UL Channel	UL Freq. [MHz]	UL RB	UL Offset	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	Maximum Tune-up Power	Single Carrier Tx Power without DL-CA Active (dBm)	Tx Power with DL-CA Active (dBm)	Total
Inter Band	CA_25A(4X4)-25A(4X4)-1D(4X4)	25	20	26365	1882.5	1	0	8365	1962.5	25	20	8365	1962.5	41	20	40185	2549.5	41	20	40383	2569.3	41	20	40581	2589.1									23	22.97	22.64	
	CA_25A(4X4)-25A(4X4)-4B(4X4)	25	20	26365	1882.5	1	0	8365	1962.5	25	20	8365	1962.5	48	20	46790	5150	48	20	46988	5169.8	48	20	47186	5189.6									23	22.97	22.47	
	CA_25A(4X4)-1E(4X4)	25	20	26365	1882.5	1	0	8365	1962.5	41	20	40185	2549.5	41	20	40383	2569.3	41	20	40581	2589.1	41	20	40779	2608.9									23	22.97	22.64	
	CA_2A(4X4)-2A(4X4)-66A(4X4)-66B(4X4)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	66	20	67038	2170	66	10	66786	2145	66	10	66786	2145										23	22.83	22.61
	CA_2A(4X4)-2A(4X4)-66A(4X4)-66C(4X4)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	66	20	67038	2170	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.69	
	CA_2A(4X4)-46A-46D	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	50665	5537.5	46	20	50665	5537.5	46	20	51061	5577.1									23	22.83	22.68	
	CA_2A(4X4)-48A(4X4)-48D(4X4)	2	20	18700	1860	1	0	700	1940	48	20	55340	3560	48	20	55780	3603	48	20	55988	3622.8	48	20	56166	3642.6									23	22.83	22.47	
	CA_2A(4X4)-48C(4X4)-48C(4X4)	2	20	18700	1860	1	0	700	1940	48	20	55340	3560	48	20	55538	3622.8	48	20	56210	3647	48	20	56408	3666.8									23	22.83	22.47	
	CA_41A(4X4)-46E	41	20	40185	2549.5	1	0	40185	2549.5	46	20	46790	5150	46	20	46988	5169.8	46	20	47186	5189.6	46	20	47384	5209.4									25	24.82	23.88	
	CA_41D(4X4)-42C(4X4)	41	20	40185	2549.5	1	0	40185	2549.5	41	20	40383	2569.3	41	20	40581	2589.1	42	20	43490	3590	42	20	43292	3670.2									25	24.82	23.74	
	CA_66A(4X4)-46A-46D(4X4)	66	20	132572	1770	1	0	67036	2170	46	20	46790	5150	46	20	50665	5537.5	46	20	50665	5537.5	46	20	51061	5577.1									23	22.99	22.35	
	CA_66A(4X4)-46C-46C	66	20	132572	1770	1	0	67036	2170	46	20	46790	5150	46	20	46988	5169.8	46	20	50665	5537.5	46	20	50665	5537.5									23	22.99	22.65	
	CA_48A(4X4)-48C(4X4)-66B(4X4)	48	20	56210	3647	1	0	56210	3647	48	20	55988	3622.8	48	20	55780	3603	66	10	67086	2175	66	10	66987	2165.1									24	23.95	22.41	
	CA_48A(4X4)-48C(4X4)-66C(4X4)	48	20	56210	3647	1	0	56210	3647	48	20	55988	3622.8	48	20	55780	3603	66	10	66786	2145	66	10	66588	2125.2									24	23.95	22.33	
	CA_48A(4X4)-48D(4X4)-66A(4X4)	48	20	56210	3647	1	0	56210	3647	48	20	55988	3622.8	48	20	55780	3603	48	20	55572	3583.2	66	20	67036	2170									24	23.95	23.41	
	CA_48C(4X4)-48C(4X4)-66A(4X4)	48	20	56210	3647	1	0	56210	3647	48	20	56012	3627.2	48	20	55780	3603	48	20	55572	3583.2	66	20	67036	2170									24	23.95	23.22	
	CA_48C(4X4)-48C(4X4)-66A(4X4)-66A(4X4)	48	20	56210	3647	1	0	56210	3647	48	20	56012	3627.2	48	20	67036	2170	66	20	66786	2145	66	20	66538	2120									24	23.95	23.88	
	CA_44A(4X4)-46A-46D	4	20	20300	1745	1	0	2300	2145	46	20	46790	5150	46	20	50665	5537.5	46	20	50665	5537.5	46	20	51061	5577.1									23	22.92	22.74	
	CA_44A(4X4)-48E(4X4)	4	20	20300	1745	1	0	2300	2145	46	20	56210	3647	48	20	56012	3627.2	48	20	55814	3607.4	48	20	55616	3587.6									23	22.92	22.65	
	CA_5A-48A(4X4)-48D(4X4)	5	10	20450	829	1	0	2450	874	48	20	55340	3560	48	20	55780	3603	48	20	55988	3622.8	48	20	56166	3642.6									23.5	23.46	23.35	
	CA_5A-48C(4X4)-48C(4X4)	5	10	20450	829	1	0	2450	874	48	20	55340	3560	48	20	55538	3622.8	48	20	56210	3647	48	20	56408	3666.8									23.5	23.46	23.32	
	CA_5A-48E(4X4)	5	10	20450	829	1	0	2450	874	48	20	56210	3647	48	20	56012	3627.2	48	20	55814	3607.4	48	20	55616	3587.6									23.5	23.46	23.32	
	CA_7A(4X4)-7A(4X4)-46D	7	20	21100	2535	1	0	3100	2655	7	20	3350	2680	46	20	50665	5537.5	46	20	50665	5537.5	46	20	51061	5577.1									23.5	23.35	23.22	
	CA_7C(4X4)-46E	7	20	21100	2535	1	0	3100	2655	7	20	3298	2674.8	46	20	46790	5150	46	20	46988	5169.8	46	20	47186	5189.6	46	20	47384	5209.4					23.5	23.35	23.31	
	CA_13A-46A-66A(4X4)	13	10	23230	782	1	0	5230	751	46	20	46790	5150	66	20	67036	2170																	23.5	23.47	23.32	
	CA_25A-26A-41A(4X4)	25	20	26365	1882.5	1	0	8365	1962.5	26	15	8865	876.50	41	20	40185	2549.5																	23	22.97	22.88	
	CA_2A(4X4)-29A-66A(4X4)	2	20	18700	1860	1	0	700	1940	29	10	9715	722.5	66	20	67036	2170																	23	22.83	22.74	
	CA_2A(4X4)-46A-66A(4X4)	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	66	20	67036	2170																	23	22.83	22.69	
	CA_2A(4X4)-4A(4X4)-30A(4X4)	2	20	18700	1860	1	0	700	1940	4	20	2300	2145	30	10	9820	2355																	23	22.83	22.65	
	CA_2A(4X4)-4A(4X4)-71A	2	20	18700	1860	1	0	700	1940	4	20	2300	2145	71	20	68761	634.5																	23	22.83	22.35	
	CA_2A(4X4)-5A-29A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	29	10	9715	722.5																	23	22.83	22.32	
	CA_2A(4X4)-5A-46A	2	20	18700	1860	1	0	700	1940	5	10	2450	874	46	20	46790	5150																	23	22.83	22.47	
	CA_2A(4X4)-66A(4X4)-71A	2	20	18700	1860	1	0	700	1940	66	20	67036	2170	71	20	68761	634.5																	23	22.83	22.35	
	CA_5A-66A-66A(4X4)	5	10	20450	829	1	0	2450	874	46	20	46790	5150	66	20	67036	2170																	23.5	23.46	22.25	
	CA_5A-7A(4X4)-46A	5	10	20450	829	1	0	2450	874	7	20	3100	2655	46	20	46790	5150																	23.5	23.46	22.21	
	CA_7A-12A-66A(4X4)	7	20	21100	2535	1	0	3100	2655	12	10	3100	2655	66	20	67036	2170	12	10	5179	743.9	12	10	5179	743.9									23	22.83	22.32	
	CA_7A(4X4)-29A-38A(4X4)	7	20	21100	2535	1	0	3100	2655	29	10	5435	780	38	20	38300	2658																	23.5	23.35	23.14	
	CA_2A(4X4)-7A(4X4)-13A	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	13	10	5230	751																				

Downlink 4X4 Carrier Aggregation Scenarios Conducted Power

Configure	Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6				Measurement Power		
		LTE Band	BW [MHz]	UL Channel	UL Freq. [MHz]	UL RB	UL Offset	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [MHz]	DL Channel	DL Freq. [MHz]	Maximum Tune-up Power	Single Carrier Tx Power with DL-CA Active (dBm)	Tx Power with DL-CA Active (dBm)
CA_2A(4X)-13A-48D(4X)	2	20	18700	1860	1	0	700	1940	13	10	5230	751	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6									23	22.83	22.36	
CA_2A(4X)-13A-66A(4X)-66C(4X)	2	20	18700	1860	1	0	700	1940	13	10	5230	751	66	20	67036	2170	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.74	
CA_2A(4X)-13A-66D(4X)	2	20	18700	1860	1	0	700	1940	13	10	5230	751	66	20	67036	2170	66	20	66838	2150.2	66	20	66640	2130.4									23	22.83	22.32	
CA_2A(4X)-14A-66A(4X)-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	14	10	5330	763	66	20	67036	2170	66	20	66786	2145	66	20	66536	2120									23	22.83	22.33	
CA_2A(4X)-2A(4X)-12A-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	12	10	5010	729	66	20	67036	2170	66	20	66786	2145									23	22.83	22.44	
CA_2A(4X)-2A(4X)-12B-66A(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	12	10	5060	734	12	10	5159	743.9	66	20	67036	2170									23	22.83	22.41	
CA_2A(4X)-2A(4X)-13A-66B(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	13	10	5230	751	66	10	67086	2175	66	10	66987	2165.1										23	22.83	22.41
CA_2A(4X)-2A(4X)-14A-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	14	10	5330	763	66	20	67036	2170	66	20	66786	2145									23	22.83	22.33	
CA_2A(4X)-2A(4X)-5A-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	20	67036	2170	66	20	66786	2145									23	22.83	22.69	
CA_2A(4X)-2A(4X)-5A-66B(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	10	67086	2175	66	10	66987	2165.1									23	22.83	22.65	
CA_2A(4X)-2A(4X)-5A-66C(4X)	2	20	18700	1860	1	0	700	1940	2	20	900	1960	5	10	2450	874	66	20	66786	2145	66	20	66588	2125.2									23	22.83	22.36	
CA_2A(4X)-46A-46C-66A(4X)	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	50665	5537.5	46	20	50863	5557.3	66	20	67036	2170									23	22.83	22.30	
CA_2A(4X)-46A-48D(4X)	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	48	20	55812	3607.2	48	20	55614	3587.4	48	20	55416	3567.6										23	22.83	22.24
CA_2A(4X)-48A(4X)-48C(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	48	20	55340	3560	48	20	55780	3603	48	20	55968	3622.8	48	20	67036	2170									23	22.83	22.10	
CA_2A(4X)-48D(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6	66	20	67036	2170									23	22.83	22.30	
CA_2A(4X)-5A-48A(4X)-48C(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	55780	3603	48	20	55780	3603	48	20	55968	3622.8									23	22.83	22.14	
CA_2A(4X)-5A-48D(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6									23	22.83	22.11	
CA_2A(4X)-5A-5A-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2600	889	66	20	67036	2170	66	20	66786	2145									23	22.83	22.14	
CA_2A(4X)-5B-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	10	67086	2175	66	10	66987	2165.1									23	22.83	22.17	
CA_2A(4X)-5B-66B(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	10	67086	2175	66	10	66987	2165.1									23	22.83	22.69	
CA_2A(4X)-5B-66C(4X)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	5	10	2549	883.9	66	10	66786	2145	66	20	66588	2125.2									23	22.83	22.54	
CA_2C(4X)-5B-30A(4X)	2	20	18700	1860	1	0	700	1940	2	20	898	1959.8	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355									23	22.83	22.44	
CA_48D(4X)-66A(4X)-46A	48	20	56210	3647	1	0	56210	3647	48	20	56012	3627.2	48	20	55814	3607.4	66	20	67036	2170	46	20	46790	5150									24	23.95	23.88	
CA_4A(4X)-4A(4X)-5B-30A(4X)	4	20	20300	1745	1	0	2300	2145	4	20	2175	2132.5	5	10	2450	874	5	10	2549	883.9	30	10	9820	2355									23	22.92	22.85	
CA_5A-48A(4X)-48C(4X)-66A(4X)	5	10	20450	829	1	0	2450	874	48	20	55340	3560	48	20	55780	3603	48	20	55968	3622.8	66	20	67036	2170									23.5	23.46	23.42	
CA_5A-48D(4X)-66A(4X)	5	10	20450	829	1	0	2450	874	48	20	55780	3603	48	20	55968	3622.8	48	20	56166	3642.6	66	20	67036	2170									23.5	23.46	23.33	
CA_5A-7A(4X)-46D	5	10	20450	829	1	0	2450	874	7	20	3100	2655	46	20	3100	2655	46	20	50665	5537.5	46	20	51061	3577.1									23.5	23.46	23.33	
CA_5B-30A(4X)-66A(4X)-66A(4X)	5	10	20450	829	1	0	2450	874	5	10	2549	883.9	30	10	9820	2355	66	20	67036	2170	66	20	66786	2145									23.5	23.46	23.25	
CA_5B-66A(4X)-66B(4X)	5	10	20450	829	1	0	2450	874	5	10	2549	883.9	66	20	67036	2170	66	10	66786	2145	66	10	66687	2135.1									23.5	23.46	23.41	
CA_5B-66A(4X)-66C(4X)	5	10	20450	829	1	0	2450	874	5	10	2549	883.9	66	20	67036	2170	66	20	66786	2145	66	20	66588	2125.2									23.5	23.46	23.33	
CA_2A(4X)-7C(4X)-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	7	20	3298	2674.8	66	20	67036	2170	66	20	66786	2145									23	22.83	22.77	
CA_2A(4X)-7A(4X)-7A(4X)-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	7	20	3350	2680	66	20	67036	2170	66	20	66786	2145									23	22.83	22.69	
CA_2A(4X)-7A(4X)-7A(4X)-46C	2	20	18700	1860	1	0	700	1940	7	20	3100	2655	7	20	3350	2680	46	20	50665	5537.5	46	20	50663	5537.3									23	22.83	22.41	
CA_13A-46B-66A(4X)	13	10	23230	782	1	0	5230	751	46	20	46790	5150	46	20	46988	5169.8	46	20	47186	5189.6	46	20	47384	5209.4									23.5	23.47	23.41	
CA_2A(4X)-13A-46A-46D	2	20	18700	1860	1	0	700	1940	13	10	5230	751	46	20	46790	5150	46	20	46988	5169.8	46	20	47384	5209.4									23	22.83	22.77	
CA_2A(4X)-13A-46B	2	20	18700	1860	1	0	700	1940	13	10	5230	751	46	20	46988	5169.8	46	20	46988	5169.8	46	20	47384	5209.4									23	22.83	22.68	
CA_2A(4X)-46D-66A(4X)-66A(4X)	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50663	5537.3	46	20	51061																	

Downlink 4X4 Carrier Aggregation Scenarios Conducted Power

Configure	Combination	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6				Measurement Power		
		LTE Band	BW [Mhz]	UL Channel	UL Freq. [MHz]	UL RB	UL Offset	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	LTE Band	BW [Mhz]	DL Channel	DL Freq. [MHz]	Maximum Tune-up Power	Single Carrier Tx Power without DL-CA Active (dBm)	Tx Power with DL-CA Active (dBm)
																																		Total		
	CA_2A(4X4)-46C-48D(4X4)-66A(4X4)	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	48	20	55812	3607.2	48	20	55614	3587.4	48	20	55416	3567.6	66	20	67036	2170	23	22.83	22.41
	CA_2A(4X4)-46D-48C(4X4)-66A(4X4)	2	20	18700	1860	1	0	700	1940	46	20	50665	5537.5	46	20	50863	5557.3	48	20	51061	5577.1	48	20	56210	3647	48	20	56408	3666.8	66	20	67036	2170	23	22.83	22.32
	CA_2A(4X4)-46E-48A(4X4)-66A(4X4)	2	20	18700	1860	1	0	700	1940	46	20	46790	5150	46	20	46988	5189.8	46	20	47186	5189.6	46	20	47384	5209.4	48	20	56210	3647	66	20	67036	2170	23	22.83	22.41
	CA_2A(4X4)-13A-46D-66A(4X4)-66A(4X4)	2	20	18700	1860	1	0	700	1940	13	10	5230	751	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	66	20	67036	2170	66	20	66786	2145	23	22.83	22.35
	CA_2A(4X4)-5A-46D-66A(4X4)-66A(4X4)	2	20	18700	1860	1	0	700	1940	5	10	2450	874	46	20	50665	5537.5	46	20	50863	5557.3	46	20	51061	5577.1	66	20	67036	2170	66	20	66786	2145	23	22.83	22.14
	CA_2A(4X4)-4A(4X4)-5A-12A	2	20	18700	1860	1	0	700	1940	4	20	2300	2145	5	10	2450	874	12	10	5095	737.5												23	22.83	22.14	
	CA_2A(4X4)-4A(4X4)-13A	2	20	18700	1860	1	0	700	1940	4	20	2300	2145	13	10	5230	751																23	22.83	22.15	
	CA_66A(4X4)-66A(4X4)-66A(4X4)-46C	66	20	132572	1770	1	0	67036	2170	66	20	66786	2145	66	20	66536	2120	46	20	46790	5150	46	20	46988	5169.8								23	22.99	22.85	
	CA_7A(4X4)-42A(4X4)	7	20	21100	2535	1	0	3100	2655	42	20	43290	3570																			23.5	23.35	23.30		